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Rifle Company Performance at the Joint Readiness Training Center: Analysis of Take Home Packages

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RIFLE COMPANY PERFORMANCE AT THE JOINT READINESS TRAINING CENTER:
ANALYSIS OF TAKE HOME PACKAGES

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ANALYSIS OF TAKE HOME PACKAGES

Introduction

The Army's capstone training manuals, Field Manual 25-100, Training the Force (Department of the Army (DA), 1988) and Field Manual 25-101, Battle Focused Training (DA, 1990) cite nine interrelated principles of training. Units intending to be successful in the AirLand Battle must adhere to all of them.

First, units must train as a combined arms team with combat, combat support (CS) and combat service support (CSS) units. Through the "slice" approach to training management, external elements (Field Artillery, Engineers, Military Police, Chemical, et al.) must be included in training events whenever possible.

The second, often quoted, principle is "train as you fight." This demands combat oriented realism such as smoke, noise, obscuration, and loss of key leaders used in every training event. The third principle, use appropriate doctrine, comes from training to the Army standards found in Mission Training Plans (MTPs), battle drill books, Soldier's Manuals, and Army Regulations. The fourth and fifth principles stress challenging, performance oriented training. The sixth principle provides sustainment by repetition of critical tasks.

Multi-echelon techniques (principle seven) are an effective use of time with simultaneous training of individual soldiers and leaders during training events. Units must train to maintain their equipment (principle eight) and finally, the leaders in the chain of command are responsible for training.

All of these principles are combined in "battle focused" training, based on a unit's Mission Essential Task List (METL). The METL is a compilation of the tasks critical to accomplishing the unit's wartime mission. The METL is categorized by the seven battlefield operating systems (BOS) - Maneuver, Fire Support, Command and Control (C²), Intelligence, Mobility/Counter mobility/Survivability, CSS, and Air Defense.

Combat Training Centers

To insure METL based multi-echelon training, the Army has in recent years increasingly emphasized externally supported training events. The Combat Training Centers (CTCs) for both light and heavy units were designed to provide opportunities for combined arms battle focused training. The National Training Center (NTC) located in the desert at Fort Irwin, California, trains mechanized units and their CS and CSS elements. The Joint

Readiness Training Center (JRTC) at Fort Chaffee, Arkansas, was established to provide similar training for non-mechanized units; the diversity of terrain and vegetation is ideal for dismounted Infantry operations. The CTCs impose a METL driven scenario with associated training and evaluation outlines (T&EOs), an opposing force (OPFOR), and highly trained observer-controllers (OCs). The CTCs provide training events that are conducted under realistic conditions, designed to replicate combat as closely as possible. There are live fire events, and through the multiple integrated laser engagement system (MILES), force on force battles.

The CTC program provides the most realistic battle environment possible for units during peacetime (FM 25-101, DA, 1990, p. D-2). CTCs give active and reserve forces ten to fourteen days of continuous field training in a stressful combat-like environment. Personnel perform soldier tasks and exercise leadership skills that impact directly on the success or failure of collective tasks and unit missions.

Performance Feedback

In addition to the immediate knowledge of results from each mission, the CTCs provide performance feedback to participating units in separate and distinct formats. A unit is provided with copies of the after-action reviews (AARs) which are conducted (and videotaped) immediately following each mission and at the end of the unit's rotation. AARs are conducted for brigade and battalion task force, and company and lower missions, as well as functional area AARs covering, for example, intelligence or CS/CSS operations.

JRTC units may gain access to performance data based on the MTP Training and Evaluation Outlines (T&EOs) (U.S. Army Infantry School, 1985). T&EOs provide summary information concerning collective training objectives as well as individual and leader tasks which support the collective objectives. However, the T&EO data, available from many battalions, are unreliable (Fober, 1993).

The third type of feedback is the Take Home Package (THP). The THPs are comprehensive after-action reports, written by the OCs immediately after the rotation. The THPs include mission summaries, live-fire reports, battle damage assessments, and reports on unit strengths, weaknesses ("areas in need of improvement"), and recommendations for home station training.

Purpose

For the past several years, the Army Research Institute (ARI) has been studying factors which determine Infantry performance at the Army's CTCs. The ARI Fort Benning Field Unit

has focused primarily on Light Infantry units training at the JRTC. This analysis has been based on questionnaires, interviews, and demographic data, together with participation in home station training and feedback from OC observations of JRTC performance. Initial findings have been reported in Dyer, Fober, Pleban, Salter, Valentine, & Thompson, (1992) and in a report by Thompson, Thompson, Pleban, & Valentine, (1991). The current ARI Benning research efforts continue with potential solutions to Light Infantry problem areas identified in the previous research.

The purpose of the specific research reported here is to document the strengths and weaknesses of Light Infantry rifle companies at JRTC through analysis of the unit THPs and to generate an overall performance baseline for small units. The THPs are the most accessible and user friendly feedback provided to units after JRTC rotations; consequently they are also a useful tool in planning for post-rotation home station training. THPs contain information on the highest level participant, brigade or battalion task force; the focus herein is on rifle company mission performance. There is ample precedent for use of the THPs to examine unit performance. For example, Shadell (1990) offers a thoughtful and comprehensive document describing use of eighty-seven battalion level THPs from the NTC. In their U.S. Army War College Staff Study, Crawford and Hensler (1990) provide a comprehensive analysis of eleven Light Infantry battalions, using interviews, questionnaires, and THPs.

Take Home Package Format

The THP is offered to the unit commander to provide "a tool to assess the performance of your task force on its Mission Essential tasks as outlined in FM 25-100 (Excerpt from the cover letter to a Brigade Task Force commander, mid-1989)." ¹ THPs begin with an overview of the Brigade Task Force trends in each of the seven BOS: C²; Intelligence; Maneuver; Fire Support; Air Defense; Mobility/Counter mobility/Survivability; CSS; plus

¹ Here and throughout the remainder of the text, individual take home packages and observer controller comments have been quoted verbatim to illustrate key points. However, to protect the anonymity of the units studied, no unit attributions will be made nor will unit identifiers or the rotation time frames be given. Comments selected for inclusion are typical, and could apply to any of a number of units. As appropriate, these comments may be included within brackets [] to distinguish them from the remainder of the text.

Nuclear, Biological, and Chemical (NBC) performance. (Appendix A provides a typical THP format from this time frame and page A-9 shows company specific content.)

The battalion review contains a summary of the missions the battalion task force conducted during the rotation. The summary of each phase contains the mission standards, a narrative of the events occurring during the mission, system summaries, and personnel casualties (starting number, killed and wounded in action, died of wounds, and fratricide). Battle damage and fire support data are reported for each mission, with summary matrices of friendly and enemy equipment damaged or destroyed.

Battalion task force trends are based on the BOS. Each BOS is presented in terms of Critical Tasks, Unit Strengths, Areas in Need of Improvement, and Home Station Training Recommendations. Task force trends also include the 81mm mortars, maintenance, medical and commo platoons. Similarly, Company/Battery/Platoon Trends (e.g., Scout, Antiarmor, Communications, Maintenance, Medical, Combat and Field Trains) are presented in terms of their critical missions and tasks.

For the Infantry Rifle Companies, the mission task list may include any of the following: deliberate or hasty defense, infiltration, air assault, search and attack, deliberate attack, civil-military operations, establish an airhead. Most units conduct three or four missions, usually a movement to contact/search and attack, a deliberate attack, and a defense. However, some units perform airborne operations, and some units conduct two attack or two defend missions.

Within each company THP, there is a summary for each mission, whether live fire or MILES. This is followed by the company's strengths, areas in need of improvement, and personnel casualties. Some THPs also offer separate sections on leader and individual skills. All include suggestions for home station training.

Procedure

Sample Battalions

Comments hereafter are based on company level THPs from 15 Infantry battalions which rotated to the JRTC during FY89 - FY91. Included here are nine Light Infantry battalions, four Airborne, and two National Guard units. As would be expected, there were performance differences between the battalions but over all their strengths, and particularly their weaknesses, were sufficiently similar to justify the decision to combine them for analysis. The battalions included 45 line companies which performed defend, attack, and search and attack (movement to contact) missions.

Some companies also performed air missions but because of the very limited number, no comments on airborne operations are included here.

Content Analysis of THPs

Since the unit THPs varied in format as well as in content, a coding scheme or framework for content analysis of the THP material was developed to attempt to describe each unit's performance on a common scale. The compiled material, frequently overlapping or redundant, had to be reordered and reformatted into a useable form so that company performance (as assessed by the content of the THPs) could be compared within and between battalions. Shadell (1990) reported using a computerized program to assist in his THP analysis. However he studied only a select group of tasks from 87 battalions rather than the entire THP, and his focus was at battalion level rather than at company. The difference in intent dictated a difference in approach. Despite the apparent difficulty in reading and coding each THP, for the present research, a checklist format presented the most workable standard format to accomplish this end.

Checklist development. The first step in codifying THPs was to develop a task list to describe the THP material. The intent was to find task and subtask labels which would fully represent the THP contents. Various training and doctrinal materials (e.g, FM 7-70 Light Infantry Platoon/Squad (DA, 1986); FM 7-71 Light Infantry Company (DA, 1987); ARTEP 7-8-MTP Mission Training Plan for the Infantry Rifle Platoon and Squad (DA, 1988); ARTEP 7-8-Drill Battle Drills for the Infantry Rifle Platoon and Squad (DA, 1990); ARTEP 7-10- MTP Mission Training Plan for the Infantry Rifle Company (DA, 1988) and FC 7-14, Light Infantry Company Operations and ARTEP Mission Training Plan (AMTP) (DA, 1985)) provided the basic framework for the material to be included. A list was developed to try to incorporate all of the relevant material in a form that was both user-friendly and sufficiently succinct as to be useful.

To ease comprehension and minimize redundancy, the task list was roughly sequenced by categories reflecting the three phases of planning (troop leading procedures (TLPs) and leader subtasks), preparation (supervision, inspections, and rehearsals) and execution (movement, attack, defend, command and control, CSS, etc.). It was further divided by mission, BOS, and by leader versus soldier skills. Some complex areas, such as "make a tentative plan" were further divided into "develop courses of action" and "develop an estimate of the situation," etc. The final list consisted of 89 tasks and subtasks related to Light Infantry operations at JRTC. The checklist was constructed to permit assignment of either positive or negative values (or both positive and negative) to the various tasks and subtasks described. Appendix B provides a copy of the final checklist.

(A similar checklist format was successfully used by Snukis (1991) in his extensive analysis of JRTC THPs.)

Coding procedures. There was a need to eliminate the effects of different OCs (areas of interest, expertise and writing style) and to accommodate the different numbers of missions and the impact of a particularly bad (or good) performance. It was therefore determined that each company in each battalion would receive only one positive check (strengths) or one negative check (areas in need of improvement) for any particular rated task or subtask. The first mention of an area within the THP (as either a strength or a weakness) was recorded by marking the appropriate column on the checklist.

For example, if the OC noted poor movement techniques during the search and attack mission, and movement techniques were also a problem in the deliberate attack, this perceived weakness was tallied only once. Similarly, if the OC indicated that a company used night observation devices (NODs) well, and then in another mission later again commented favorably on use of NODs, only one mark was made in the positive column. If weaknesses were later observed, that column could then also be marked one time. No task category, therefore, could have more than one positive check mark and one negative one per company, no more than three each per battalion. If no comment, either positive or negative, was made in an area, the columns were left blank.

Since not all the THPs had the same formats, differing amounts of information were available for each battalion depending on when its rotation to JRTC occurred. Early rotation THPs covered all missions together in the comments; later THPs evaluated each mission separately. The selected means of tabulation of task and subtasks and a single scheme for all battalions permitted comparisons with the greatest amount of standardization, although the procedure produced some loss of data on specific unit or mission performance from the later rotations. Since the intent was to capture overall trends, this consolidation of missions was not considered to be a problem.

The Home Station Training (HST) recommendations were detailed at the end of each company's section of the THP. They typically covered broad categories of performance (e.g., TLPs, defensive operations, consolidation and reorganization, logistics, etc.). The task and subtask checklist items which corresponded to each of the recommendations were marked accordingly. Additional HST recommendation areas which did not appear on the checklist were also tallied. One broad area included the conduct of after-action reviews after multi-echelon force on force training engagements. Units were also told to practice drills and develop and adhere to a good tactical standing operating procedure (SOP) to enhance performance. (Appendix D contains HST information.)

Coding and reliability. Several iterations of checklists were developed to arrive at one that was both useful and useable. The checklist had to cover all the material without being so large as to be unmanageable. After an initial checklist was constructed, ARI personnel read and coded sample THPs. Frequency counts were made of the areas of agreement and disagreement in coding; the areas of disagreement were discussed to determine where differences in interpretation occurred. Most of the variability was due to the rather general nature of the task and subtask categories; familiarity with the format produced more stable ratings. Failure to note occurrence of a comment was more frequent than disagreement over the category in which to place it. Never did the raters disagree as to whether the intent of an OC's comment was to praise or fault.

The checklist was re-edited to increase reliability and to eliminate known problem areas, and the rating procedure was redone. An Agreement Coefficient (see Krippendorff, 1980, page 133ff) of .81 was reached for overall reliability in coding of the THPs. This included the "strengths" and "areas in need of improvement" sections of the checklist as well as concurrence on absence of comment (either positive or negative). It was felt that for the purposes of this study, and given the nature of the data, sufficient agreement on terminology had been reached to proceed with coding of all companies.¹ Shadell (1990) notes that experience and familiarity with terminology is required to provide reliable interpretation of THP content, and is a recurrent concern in THP analysis.

Results

After all 45 company THPs had been coded, summary sheets were made for the entire sample. Each company had one positive and/or one negative mark in each checklist category, or no marks at all if neither positive nor negative comment had been made. The scores for each battalion were then summed. Home station

¹ In his text Content Analysis. An Introduction to its Methodology, Krippendorff (1980) states that a content analyst must "determine how the reliabilities encountered in the data will affect his findings. Some content analyses are very robust in the sense that unreliabilities become hardly noticeable in the result (p.147)." Additionally, "a content analysis [is] valid to the extent that its inferences are upheld in the face of independently obtained evidence (p. 155)." As will be shown later, the findings reported here correspond to those reported in other research. Interrater coding reliability was therefore deemed both adequate and sufficient for this research.

training recommendations were also tallied and are discussed separately below. Although some of the 15 battalions appeared to perform better than others, their individual and collective performances showed markedly similar patterns.

Some tasks and subtasks on the summary checklist had only a very few marks recorded; other categories had received many comments. Both the positive and negative comments were summed separately and percentages calculated. In only 13 of the 89 tasks or subtasks did 25% or more of the units receive praise or positive comments. In contrast, 60 of 89 task categories received negative comments for 25% or more of the companies. Additionally, many of the positive comments for a company were counterbalanced by negative comments in the same categories. This was only occasionally true for negative comments. Looking at the distribution of comments overall, it is apparent that many fewer strengths were cited than areas in need of improvement. The highest percentage of companies receiving positive comments on any one task was 69%, for one task only; in contrast, 15 tasks received 69% or greater negative comments. Appendix C contains the entire tasklist with numbers and percentages of both positive and negative comments, as well as instances where no comments or both were made. Only relatively high scoring areas will be discussed in detail.

Strengths

Every THP offers some positive comments about the strengths of each company. The favorable comments tend to be rather unstructured and frequently counterbalanced by strong or stronger comments indicating that performance on the particular task cited was also in need of improvement. The tendency for a company to be both praised and faulted in the same performance category occurred throughout the THPs. For example, a unit was praised as "leaders correctly analyzed the amount of equipment and supplies needed for the attack" but later, "no one in the chain of command ever checked the soldiers' individual loads." Sometimes the performance varied within the same missions; other times from one mission to another.

Table 1 shows checklist task categories in which 20% or more of the 45 companies received somewhat favorable comments. The categories are shown in descending order; identical percentages are grouped together. In some instances the number of negative comments was as high or higher than the positive. Both sets of numbers and percentages are shown and the negative number, if larger, is marked with an asterisk(*).

Table 1

Unit Strengths: Percent of Companies Cited

	<u>Strengths</u>	<u>Needs Improvement</u>
Morale & Physical Conditioning	69	20
Tactical Movement	67	71*
Formations	51	47
Navigate	51	24
Soldier Load	47	22
Use Night Observation Devices (NODs)	47	11
Employ Fire Support	42	87*
Casualty Evacuation/Treatment	36	73*
Operations Order (OPORD) Format	29	18
Briefbacks	29	49*
Use of Mortars	29	51*
Noise Light & Litter Discipline	27	62*
Operations Security (OPSEC)	27	93*
Precombat Inspections (PCIs)	24	51*
Establish/Maintain Commo	24	78*
Collect/Report Information/ID	24	80*
Sustain/Logistics	22	36*
Integrate External Assets	22	38*
Use Covered/Concealed Routes	22	38*
Use Factors of METT-T	22	67*
OPORD/Key Personnel Present	20	16
Know Location	20	29*

Note. Overall N = 45 companies. * highlights areas where negative comments occurred more often than positive comments.

The most frequently cited unit strength was the category encompassing overall morale, attitude, willingness to learn, and acceptance of constructive criticism ["Soldiers displayed a willingness to do well and remained highly motivated. The unit was eager to find the enemy and destroy him." "They maintained a positive attitude and did not complain about hardships." "Under the adverse conditions and tremendous amount of stress that the JRTC placed upon this unit, ... soldiers handled themselves well,

continually displaying a high degree of motivation and discipline"]. Also included here were positive references to physical conditioning ["All were in excellent condition"] and small unit leadership. Of the 45 companies surveyed, 69% received favorable comments from the OCs in these areas. Although some units (20%) received negative comment, there were few, and those comments tended to focus on lack of fitness ["After the first three contacts the soldiers became increasingly fatigued, and standards of IMT dropped dramatically and led to several casualties"]. Most companies were cited as being able and willing to learn from their mistakes; both leaders and soldiers were praised for acceptance of the JRTC as a learning experience.

Another area with a relatively high number of positive comments was tactical movement, where 67% of all companies received some praise. Typically this referred to daylight movement and navigation (51%) ["Leaders were able to navigate from point to point during daylight hours quickly and effectively. They showed an ability to terrain associate and use the compass and pace count in concert so as to determine their exact location"] or to the use of good formations (51% positive comments) ["Squads and teams moved in the wedge formation both in daylight and at night. Soldiers automatically adjusted distances between each other without supervision"]. Some units did well overall ["The squad leaders were good at navigation during both day and night. They used effective terrain association along with compass headings to determine their position"]. They knew their locations, and used covered and concealed routes and "effectively used the terrain to mask their movements and protect the force."

However, tactical movement, especially but not always during limited visibility, was also cited in 71% of the companies in a negative manner and 47% were faulted on formations. Movement also includes use of covered and concealed routes, breaching obstacles, etc. Comments were both favorable and unfavorable in these categories, tending toward the negative. Frequently the same unit was cited as both strong and weak in movement; the performance was dependent on the situation. Forty percent of the companies received both positive and negative comments on tactical movement. A unit excelling in tactical movement during the day, with good formations and technique, might evidence breaks in contact at night ["The unit routinely failed to properly determine and set their routes during night movements. Leaders failed to study routes to be used during darkness"].

Just under half (47%) of the companies showed that they were able to utilize night observation devices (NODs) ["Platoons, squads and the individual soldier have become more aware of the effectiveness of night observation devices. [They] maximize the use of AN-PVS-7s and AN-PVS-4s throughout their rotations ... [to

improve] their night operations and security measures." "Unit effectively used infrared chemlights and infrared capability of the AN-PVS-7s"].

Soldier load received some praise (47%) ["Leaders correctly analyzed the amount of equipment and supplies needed for the attack." "The soldiers' loads were tailored to the mission. Leaders used METT-T to determine the ammunition, food, and mission essential equipment to be carried." "The soldier's load was adequate to sustain the force but did not inhibit movement"]. However, fully 22% were cited as failing to tailor the load to the mission, or to adhere to an acceptable weight per soldier.

The only other area with a relatively high number of positive comments was use of fire support, which was cited as a strength in 42% of the THPs ["Leaders planned for indirect fires, both mortar and artillery." "Platoon leaders coordinated with the mortar section sergeant prior to operations"]. However, 87% of the companies were also criticized for failure to use fire support correctly. Typically, fire support planning was adequate or even good, but execution was poor. Thirty-one percent of the companies received both positive and negative comment in fire support. Mortars (29% positive but 51% negative) were rarely or poorly employed; frequently the planning was good, but key personnel were not available to hear it, or the plans did not fit into the overall scheme of maneuver.

Some units (27%) were praised for good operations security (OPSEC), ["The overall use of passive security has increased within squads"] including noise, light and litter discipline (27%) ["The unit did very well in keeping the noise level down during all operations, and rarely used lights to aid them during periods of limited visibility." "Soldiers in patrol bases and ORPs moved only when necessary and leaders kept their voices low and radio transmissions short"]. However, both of these categories were high on the list of areas in need of improvement and OPSEC in particular was the most often cited area in need of improvement over all companies. Both positive and negative comments were offered for 24% of the companies.

Although casualty evacuation received positive comment in 36% of the THPs, most of it was reserved for small unit (platoon and squad) treatment and buddy aid ["The individual soldier was well versed in Skill Level 1 first aid techniques." "Combat Lifesavers provided additional expertise providing buddy aid to soldiers." "The soldiers moved all the casualties to the casualty collection point, performed first aid, and evacuated the casualties by priority"]. Most comments on casualty evacuation and treatment were unfavorable (73%) as personnel, adequately treated at small unit level, died of wounds before company or battalion evacuation.

Some units (24%) showed ability to establish and maintain communications ["The use of PRC 126's within the platoon was handled well. Platoon leader attempted to keep squad leaders informed"] but most comments on reporting and coordination were negative in tone. Similarly, logistics and resupply occasionally (22%) received praise ["Leaders determined Class IV requirements and the company XO ensured barrier material was delivered in adequate quantities, at the right place, and in a timely manner"].

Some areas within the traditional troop leading procedures received positive comments. These included use of the operations order (OPORD) five paragraph format (29%), presence of key personnel at the OPORD (20%), use of METT-T in the tentative plan (22%), and conduct of briefbacks (29%). However, as noted previously and shown in Table 1, most of these areas in which the units were cited for positive performance had good comments simultaneously counterbalanced by unfavorable ones ["Leaders know the five paragraphs to an operations order but do not know how to analyze the mission using METT-T to prepare a good operations order"].

Areas in Need of Improvement

Most comments in the company THPs were negative in both tone and content, indicating areas where the OCs felt that units were in need of improvement. Some weak areas comprised leader skills, others individual; most referred to the performance of the entire unit. Problem areas which surfaced during one mission tended to recur in others. Table 2 indicates the areas where 20% or more of the companies were cited as being in need of improvement. Entries are presented in descending order, with identical percentages grouped together. As with Table 1, in instances where the counterbalancing positive comment was higher, those figures are highlighted with an asterisk (*). Most problem areas are discussed below and in Table 2; the full set of data is presented in Appendix C. For ease of presentation and discussion of results and examples, the areas in need of improvement are grouped logically according to planning, preparation and execution.

The eight planning steps which taken together comprise the category Troop Leading Procedures (TLPs) were, on the whole, cited as areas in need of improvement. A few units performed well in some or all steps of TLPs; a company which tended to have problems in one area tended to have problems in many. Frequently, the OC who wrote the THP cited performance on TLPs in general as in need of improvement (36% of the units); other comments mentioned only specific areas. The following comment was not unusual: "Leaders did not adhere to the TLP procedures. They used their time poorly, prepared poor orders and did not follow them up with rehearsals. They did not issue

Table 2

Areas in Need of Improvement: Percent of Companies Cited

	<u>Needs Improvement</u>	<u>Strengths</u>
Operations Security (OPSEC)	93	27
Actions on the Objective	87	7
Employ Fire Support	87	42
Rehearsals	84	13
Command and Control	82	16
Collect/Report Information/ID	80	24
Communication	78	24
Actions on Contact	76	9
Use Observation/Listening Posts(OP/LP)	76	11
Casualty Evacuation/Treatment	73	36
Consolidation	71	11
Make Tentative Plan	71	13
Tactical Movement	71	67
Control Direct Fires	69	2
Time Management	69	18
Courses of Action (COAs)	67	13
Use Factors of METT-T	67	22
Internal Coordination	64	13
Reorganization	64	16
Battle Drills	62	4
Noise Light & Litter Discipline	62	27
Operations Order (OPORD) Content	60	16
Supervise/Spot Check	56	11

Note. N = 45 companies except for + defensive tasks where N = 42.
 * highlights areas where positive comments occur more often than negative comments.

Table 2, Continued

Areas in Need of Improvement: Percent of Companies Cited

	<u>Needs Improvement</u>	<u>Strengths</u>
External/Adjacent Coordination	53	7
Receive the Mission	53	9
Fire and Maneuver	53	9
Rest/Alert/Sleep Plan	53	11
Estimate of Situation	51	16
Precombat Inspections (PCIs)	51	24
Use of Mortars	51	29
Construct/Cover Obstacles+	50	7
Select Defensive Positions+	50	7
Coordination Overall	49	4
Briefbacks	49	29
Alternate & Supplementary Positions+	48	0
Formations	47	51*
Defensive Priority of Work+	45	10
Construct Defensive Positions+	45	12
Use of OCOKA	44	2
Leader Reconnaissance	44	13
Weapons/Equipment/Vehicle Inspections	44	16
Reconnaissance & Surveillance (R&S)	42	11
Perform Operator Maintenance	42	18
Defend/Actions on Contact+	39	2
Complete the Plan	38	4
Patrols/Patrol Base Activities	38	16
Use Covered/Concealed Routes	38	22
Integrate External Assets	38	22
Tactical SOP	36	4
Troop Leading Procedures (Overall)	36	4
Camouflage Self and Position	36	7
Sustain/Logistics	36	22

Note. N = 45 companies except for + defensive tasks where N = 42.
 * highlights areas where positive comments occur more often than negative comments.

Table 2, Continued

Areas in Need of Improvement: Percent of Companies Cited

	<u>Needs Improvement</u>	<u>Strengths</u>
Range Cards/Sector Sketches+	33	5
Process Enemy Prisoners of War (EPWs)	31	11
Assembly Area Procedures	31	11
Individual Movement Techniques (IMT)	29	13
Issue Warning Order (WO)	29	18
Refine Plan, React to Change	29	18
Know Location	29	20
Linkup/Passage of Lines	27	9
Fighting/Battle Position	24	2
OPORD, Prepare and Deliver	24	11
Navigate	24	51*
Soldier Load	22	47*
NBC	20	4
Move as Member of a Team	20	9
Morale, Conditioning	20	69*

Note. N = 45 companies except for + defensive tasks where N = 42.
 * highlights areas where positive comments occur more often than negative comments.

complete warning orders. Subunit and coordinating instructions were incomplete and lacked sufficient detail."

TLPs include "receive the mission," where 53% of the companies were considered below standard. A typical OC's comment concluded that "Subordinate leaders did not fully understand the mission and intent two levels up. Leaders did not develop tentative plans that addressed all critical tasks." Make a tentative plan was specifically cited for 71% of all companies. The tentative plan includes the estimate of the situation (51%) and wargaming through development and analysis of multiple courses of action (COA) (67%) ["The commander usually developed only one COA. The COA did not always address specified and implied tasks"]. The tentative plan also includes consideration of the factors of Mission, Enemy, Terrain, Troops and Time (METT-T) (67%) ["He failed to consider the probable enemy locations that his METT-T analysis identified when he selected his infiltration route"]. Companies also had problems with use of

Observation and Fire, Concealment and Cover, Obstacles, Key Terrain, and Avenues of Approach (OCOKA) (44%) [Avenues of approach were identified in the defense only"]. Typical comments included focus on inadequate mission analysis ["The CDR identified all of his specified tasks, but only identified one of the several implied tasks... He failed to think through how the enemy and the terrain would influence the company mission." "The leaders did not analyze their missions to determine implicit and specified tasks"]. Many companies needed improvement in all of the areas subsumed under the tentative plan.

Sixty percent of the companies had difficulty with the content of the OPORD ["Leaders know the five paragraphs to an operations order but do not know how to analyze the mission using METT-T to prepare a good operations order." "The leader failed to develop a complete, detailed OPORD with the five paragraph OPORD format. This resulted in the unit operating from a continuous stream of FRAGOs." "Orders were not to standard, and when issued, did not follow the format"]. Warning orders (29% negative comments) "did not provide enough information for subordinates to begin planning." The leader recon, cited for 44% of the companies, was a problem area ["... occupied the defensive sector without conducting a leader's recon"].

Supervision, precombat inspections (PCIs) and preventive maintenance checks and services (PMCS) were problems for 56% ["Supervision throughout the company was inconsistent and frequently not to standard... PMCS was not supervised or regularly performed and PCIs were rarely conducted or effective." "The Plt Ldr and the Plt Sgt failed to issue detailed instructions for PCIs. The sqd leaders conducted PCIs in a hurried manner and failed to make corrections on the spot." "Supervision by the unit chain of command was inconsistent"]. The impact was far-reaching ["On several occasions during the defense, squad leaders did not personally supervise their squads while preparing fighting positions. The soldiers did not finish constructing their fighting positions because of this"].

Inspections (51%) "were not routinely conducted." Operator maintenance (42%) was frequently highlighted ["Both personal and crew-served weapons were not maintained... resulting in many cases of malfunctioning weapons when their fire power was needed. Soldiers did not demonstrate the personal initiative to clean their weapons and leaders did not enforce maintenance"]. Camouflage of the individual soldier and his position was noted for 36% ["Soldiers did not camouflage themselves, positions or equipment to standard. In and around patrol bases and fighting positions, equipment was left out and not covered or concealed in any manner"].

As a part of the preparation process, many units had considerable difficulty with briefbacks (49%) ["Backbriefs at

company level were ineffective...critical information was not covered." "Briefbacks were ineffective and only served to make sure that the leaders and individual soldiers had an understanding of the plan"]. Time management (69%) was a continuing problem ["During their METT-T analysis company commanders do not develop a detailed time schedule to cover the use of available time for planning, preparation and execution." "Company commanders rarely issue a time schedule as a part of their warning order. Then they issue a time schedule in the OPORD that lacks detail and ends after the movement phase"].

Rehearsals needed improvement 84% of the time. One OC's comments were typical: "The company did not rehearse the tasks specified in the task force OPORD. Although squads, platoons and the company conducted rehearsals, the focus was on ... initial position occupation. The unit did not rehearse those tasks to proficiency. The rehearsals did not include actions on the objective, reaction to indirect fires, or casualty evacuation. During the execution phase of the operation, the unit had difficulties in performing these tasks." Similarly, "The unit rarely conducted briefbacks or rehearsals. The commander planned them but the unit usually ran out of time. When conducted, rehearsals did not focus on critical tasks." Another typical comment was that "generally leaders did not conduct full dress rehearsals although preparation time was adequate. Most rehearsals were talk-through, walk-through briefs."

Assembly area procedures were faulted in 31% of the companies ["Leaders did not establish priorities of work in the AA." "Local security in assembly areas and patrol bases was poor; stand to was not always enforced." "Platoon actions in the assembly area consisted of implementing the sleep plan"]. Many companies received unfavorable comment about their sleep/alert plans. Some were cited for failing to have any; others for failure to enforce them. Soldier load was cited for 22% ["The fighting load prescribed was too heavy. Equipment was carried without regard to METT-T considerations"].

Over one-third of the companies were specifically faulted for their tactical SOPs (TSOPs). Some units had inadequate SOPs; others did not appear to follow one ["In violation of the Co SOP the unit rarely rose before daylight and emphasis was placed on breakfast, not the 100% security." "Rest planning was not SOP; this often resulted in a 100% rest plan." "The unit did not have any observed company TSOP for routine reports"]. SOP deficiencies contributed to all other problem areas.

During the execution phase, the area in need of improvement mentioned in the greatest number of companies was maintaining operations security (OPSEC), where 93% (all but three companies) received at least one negative comment, and most received repeated comment on poor security procedures. Security was

inadequate in offensive and defensive missions, during movement, at halts, and in the assembly area ["Leaders did not enforce security. Soldiers fell asleep during guard. During movement soldiers stopped and did not face out and provide front, flank, and rear security. Units did not maintain the proper security based on the tactical situation." "The company displayed a lack of concern for security. Leaders allowed security along the AA defensive perimeter to become nonexistent during hours of darkness." "Leaders consistently violate OPSEC by talking 'in the clear' on their unsecure PRC-64/126 radios. Leaders typically pass friendly locations, intentions, and situations without attempting to encode them." "At security halts, soldiers did not face out or maintain noise discipline"].

OPSEC also encompasses noise, light and litter discipline (62% unfavorable comment) and failure to use observation and listening posts (OP/LPs) (76%). Excessive noise and light were cited especially at night, but problems also occurred in the day ["Radios were not turned down after vehicle engines were shut off, and soldiers tended to make too much noise when opening and closing the vehicle doors...Soldiers smoked openly after EENT, and flashlights were not shielded or used with filtered lenses. Soldiers did not enforce litter discipline and equipment was scattered throughout their position." "Soldiers talked too loud, especially when they sent radio messages or when they issued instructions." "Noise discipline degraded as operations continued"].

Reconnaissance and surveillance (R&S) in general was cited unfavorably in 42% of the cases, and 38% had some difficulty with patrols and patrol bases (PB) [" platoons did not use OPs or R&S patrols for PB security...Leaders did not adjust perimeters at daylight and did not conduct stand-to." "They did not plan alternate patrol bases. The unit did not rehearse patrol base occupation, activities or departures. Security in most patrol bases was weak"]. Observation Posts (OPs) and Listening Posts (LPs) were cited in 76% of the companies ["Units did not employ LP/OPs and available early warning devices." "Leaders emplaced OP/LPs but did not ensure covered and concealed routes were identified or that camouflage was adequate." "OPs were not regularly employed to provide early warning nor were local R&S patrols sent out to clear the area"].

Another very weak area was actions on the objective where 87% of the companies were cited for poor performance. Individual movement techniques (IMT) were specifically cited for 29%. Typically, units tended to focus on movement to the objective, rather than on the objective, where operations became piecemeal and uncontrolled ["Fire Team and Squad leaders did not effectively control soldiers on the objective. Leaders quickly lost control of their elements and soldiers did not execute IMT." "While trying to develop the situation the leaders often lost

control of their men. This loss of control resulted in individual soldiers assaulting enemy positions without suppressing fires covering them"].

Inadequacies during actions on contact were cited for 76% of all companies, and failure to execute combat drill was specifically mentioned in 62% of the company THPs ["After making contact ... leaders took a number of minutes to develop the situation and react to the enemy." "The unit could not execute squad or platoon combat drill upon contact. When the unit made contact teams and squads did not fight as units. Leaders failed to take control of the unit and maneuver it in order to destroy the enemy. In most cases the enemy had freedom to maneuver because the friendly unit failed to place effective and controlled fires on enemy positions." "Contact was made with the enemy and the platoon failed to react in an aggressive and controlled manner." "Upon receiving fire, soldiers did not take cover and return fire within three seconds." "The commander was not able to influence the battle once in contact"]. A typical comment on battle drill included the statements that "the platoons and squads did not execute appropriate battle drills for the assault. The assault became an unsupported movement to contact."

Ineffective fire and maneuver (53%) produced an inability to move under direct fire ["Soldiers did not use proper IMT when in contact. Soldiers' rushes were greater than five seconds. Soldiers rarely used low crawl and high crawl techniques." "Individual soldiers did not conduct basic IMT. They did not do cover-to-cover routes...Soldiers rarely teamed up in two or three man buddy teams to conduct movement." "Soldiers did not consistently perform IMT or fire and maneuver by buddy teams"].

Poor tactical movement (71%) was apparent ["Leaders failed to identify the proper movement techniques based on METT-T. Units remained in file despite good visibility and open terrain"]. Forty-seven percent failed to select appropriate formations and 38% did not select covered and concealed routes ["Squads and platoons are continually misusing terrain"]. Twenty-nine percent lacked knowledge of unit location. Passage of lines and linkup problems (27%) were a part of poor tactical movement and coordination ["The unit did not coordinate with the stationary unit." "The link up site was not easy to recognize." "Many squads never made it to the link up point"].

Consolidation on the objective was poor (71%), as was reorganization (64%) as a whole ["Elements did not reestablish the chain of command and commo nets. Platoons left key positions unfilled." "After actions on the objective the platoons had no idea of their personnel or supply status." "Upon completion of the trench clearing operation, the platoon lost its focus"]. Treatment and evacuation of casualties was generally poor (73%).

Squads and platoons frequently did well in treatment of casualties, but company and higher failures to plan for and provide evacuation resulted in many personnel being assessed as having died of wounds ["Many units have not thought out the process of evacuating casualties from the battlefield." "The unit did not plan or rehearse how to react to combat with casualties." "During the planning of combat operations, lip service is given to casualty evacuation"]. Poor handling of enemy prisoners of war (EPWs) was mentioned for 31% ["Soldiers demonstrate little skill in handling EPWs...they rarely designated search teams." "The squads that overran the enemy casualties did not correctly execute consolidation and reorganization... Squads took so long to search the enemy bodies that the Plt Leader had to stop them in order to move on and maintain momentum"].

Many problems stemmed from lack of C², cited for 82% of the companies ["Squad leaders are continually using control measures which do not adequately insure good execution and compliance by team leaders and squad members...teams are too far apart for the squad leader to control. When this occurs, contingencies other than hand and arm signals are not present." "Squad leaders did not provide C² over teams, resulting in events generally bunching up at the breach points"]. They did not control soldiers or fires (69%) ["Leaders failed to control their soldiers' fire during contact. Leaders did not designate targets for their soldiers, nor did they have their soldiers apply a heavy volume of fire when necessary." "Squad and team leaders did not use any method to mark targets." "Fire team leaders did not control their fire teams. When contact was made they tended to forget about their team and become individual riflemen" "Squad and fire team leaders rarely gave instructions to their soldiers on where and how much to fire." "During a deliberate attack, leaders made no attempt to control rates of fire and ensure fires were distributed correctly. Control measures were non-existent"].

Communication was a problem for 78% of the companies ["Squad patrols continually moved beyond the range of their commo equipment. Moving units did not have adjacent unit call signs and frequencies when their route brought them near a unit boundary." "Radio procedures were not conducted to standard; the unit used non-standard signs on internal nets." "Communications were limited to the radio; wire communications were not used."] Inadequate commo contributed to other difficulties ["Key leaders did not maintain contact with RTOs. Leaders lost control of their units and became riflemen. Actions on the objective degraded into individual soldier movements"].

Collecting, reporting and dissemination of information was poor (80%) ["The company commander did not receive timely, accurate or complete reports from platoon leaders." "They did

not use a standardized format to report enemy contacts." "Soldiers were unable to properly identify enemy weapons and equipment in order to submit accurate SALUTE reports to their higher headquarters." "Soldiers received little information on the mission"].

Overall lack of coordination (49%), both internal (64%) and externally between units and with higher units (53%) was evident ["The CDR failed to coordinate with the units that were adjacent to his positions or moving through his AO. The sqds did not know friendly locations and situations." "Leaders at all levels failed to make any coordinations with adjacent units. During the search and attack operation, several squads wandered into other platoon sectors"]. Coordination with and integration of external assets (38%) frequently stemmed from failure to include engineers and others in planning ["Elements attached to the unit are not integrated into the plan." "Poor coordination between the platoon and the engineers resulted in an obstacle that restricted rather than assisted the platoon"].

There were also problems in the arena of CS and CSS. Logistics and sustainment were highlighted in 36% of the cases ["Equipment sent forward to the platoons was either not what was requested or was more than what was requested." "The resupply plan did not support the scheme of maneuver." "The commander and the XO did not forecast required supplies to support the defense"].

As noted earlier, fire support was weak in 87% of the companies ["The CDR and the FIST chief did not integrate the scheme of maneuver and fire support plan...The mortar section could only provide support to one platoon because of fire support coordination measures... the other platoons were not provided with any other indirect fire support asset." "The FSO went to extensive length planning fires that supported no one." "The fire support plan rarely supported the movement of the unit... was not an integral part of briefbacks or rehearsals"]. The use of company mortars was specifically mentioned as a weakness for 51% of the units ["The mortar section was not in position to support the unit ... did not fire one mission in support of the attack." "Employment of the mortar section during the infiltration was not to standard. Firing positions were not identified"].

For the 14 battalions with a defensive mission, priority of work received many negative comments (45% of the companies) ["The unit had no clear priorities of work in the defense. The unit had no SOPs for defensive operations." "Neither platoon established task priorities based on METT-T considerations or initially established OPs for local security." "Priority of work included little more than rest or security"]. Units also had difficulty in construction and covering of obstacles (50%)

["Commanders and platoons failed to develop a cohesive, integrated obstacle plan. Few obstacles were tied to existing natural obstacles; most were easily bypassed by the enemy"]. Nuclear, biological and chemical operations (NBC), rarely mentioned in the early rotations, were heavily criticized in later rotations, for 20% of companies overall ["The company OPORD omitted NBC operations. Soldiers and leaders did not understand the enemy's chemical capabilities, likely targets, or actions to be taken on attack. Company NBC equipment was not brought forward from the field trains. Soldiers did not have and properly wear MOPP gear"].

Selection (50%) and construction (45%) of positions was a major problem ["The platoons and company did not correctly position crew served weapons to maximize their capability. Machine guns had limited fields of fire, did not cover the frontages of platoons, or provide interlocking fires with adjacent units." "Aiming stakes were not used." "The fighting positions constructed did not protect soldiers against small arms fire, indirect fire or ground observation. Positions did not provide mutual supporting fires, good observation or good fields of fire." "Individual positions were easily identified from the front"]. Forty-eight percent failed to select alternate and supplementary positions ["Alternate and supplementary positions were not identified and prepared"]. Additionally, 33% of all companies had inadequate (or missing) range cards and/or sector sketches ["Range cards, when prepared, were not constructed to standard." "Sector sketches did not include major terrain features and ranges to them"].

Discussion

As can be seen from the results of the THP analysis, the relative strengths and areas in need of improvement of Infantry battalions at JRTC are not only readily apparent, but fairly consistent within and between battalions. The JRTC learning experience is stressful, and an extremely rigorous exercise of a battalion or company's readiness. Operations are continuous, and both the weather and casualty play are real and unpredictable factors. The OPFOR is well practiced, and the OCs, also well practiced, are quick to note any shortcomings or failures. Most of the THP comments on individual companies are negative in tone despite occasional performance successes. Shadell (1990) reported similar findings in his analysis of NTC THPs and notes that this disparity is not inappropriate in view of the intended need to focus on areas requiring correction.

Strengths

The primary soldier strengths lie in their willingness to learn and in their ability to start again after an unsuccessful

mission. To the extent that the JRTC experience is a training event, not a test, this is good, as they are able to learn from their mistakes. Morale remained high in most units, despite tactical failures; further learning occurred as units were receptive to the constructive criticism they received. The willingness to profit from their mistakes also implies potential for improvement after a return to home station; it was stated that most units welcomed the opportunity to determine their strong and weak points.

Small unit leadership was also a strength. This is confirmed in a Center for Army Lessons Learned (CALL) Bulletin published by the Combined Arms Center at Fort Leavenworth which highlights small unit leadership as one of the strong points during Operation Just Cause (CALL, 1990, October, Vol. I). Leadership is coupled with, and perhaps a contributor to, the overall positive motivation and attitudes attributed to the soldiers. These findings on motivation and cohesion are supported by others (e.g., Julien & Siebold, 1990). The positive attitudes combined under the rubric of morale are important contributions to mission success, and show continued potential for learning and improvements to performance.

Another frequently cited strength was tactical movement, formations and navigation, primarily during the day. This is reinforced by Crawford and Hensler (1990) and a U.S. Army Infantry School report (Siebert, 1990a), which noted strengths in navigation. Some units and individual leaders navigated well at night using NODs. OPSEC was often adequate during the day, as were noise and litter discipline. Many units were praised for their improvements as the rotation progressed, performing better in the later missions. Units showed flexibility and ability to react in response to unexpected changes from battalion level.

Small units did well in casualty treatment and evacuation; the process tended to deteriorate at company level and battalion. Buddy aid and combat lifesavers were very effective on the spot, but when units failed to follow through on the casualty evacuation plan, many personnel unnecessarily died of wounds as time for treatment intervention expired. Similarly, individual soldiers did well in communication and submission of specific reports; the failure was often in communicating with higher, or with adjacent units.

Areas in Need of Improvement

Based on their review of JRTC performance, Crawford and Hensler (1990) note that command and control is the system which causes the most problems. That finding was reflected here and in Siebert (1990a) and Shadell (1990). Thompson et al., (1991), studying battalions, report extensively on problems in command

and control through lack of staff functional area training and synchronization. Shaneyfelt and Lambert (1992), in discussion of command and control problems, highlight leader training, communications, staff involvement, and commander's intent, with the most critical issue being that of leader training. Snukis (1991) also notes inadequate leader and staff training as primary factors. They in turn are reflected in deficiencies in the entire planning process, including, but by no means limited to, TLPs. One of the biggest problem areas appears to lie in the tentative plan, with inadequacies in the estimate of the situation. Mission analysis is a problem, and many leaders have difficulty in wargaming. They tend to assume that only one COA exists, or they fail to develop more than one. These weaknesses are also noted in Siebert (1990b) and Snukis (1991), and represent an overall weakness in planning by small unit leaders.

Some difficulties are related to inadequate time available, or allocated, from battalion; often the company makes poor use of the time it has. Snukis' 1991 study on TLPs focuses on major and pervasive problems stemming from ineffective use of time. Poor use of time (failure to adhere to the one third-two thirds rule) impacts on subordinates who do not have enough time for their own planning. Poor time management also affects, for example, the leader's ability to perform a recon. As noted by Crawford and Hensler (1990), this problem is particularly critical in the defense. Additionally, leaders fail to consider all the factors of METT-T, especially terrain. When these steps of the TLPs are deficient, the overall plan suffers, as does the execution phase of the mission.

The OPORD itself, although frequently good, needs emphasis. Some leaders did not adhere to the format. Others with the format correct had such poor delivery or had so few leaders present that a good order was ineffective. The content was often inadequate; some paragraphs were complete, while others (fire support, coordination, CSS) were almost non-existent. Inadequate orders directly impacted on performance on the objective.

Supervision, whether spot checking or precombat inspections of weapons, personnel and equipment, was often overlooked, perhaps again because of inadequate time management. Leaders indicated that they intended to inspect, but failed to do so, or inspected only a portion of the company. Sometimes soldier load was specified, but not enforced. Shaneyfelt and Lambert (1992) also found these deficiencies as did a CALL bulletin which details the historical precedents for these and similar problems (CALL, 1988, April).

Rehearsals, and to a lesser extent briefbacks, were infrequently done, or if done, not done to standard. A rehearsal was conducted, but without key elements, or on the wrong portion of the mission or in the wrong order. Shadell's 1990 study of

battalions rotating to the NTC confirm this as a pervasive problem. Evidence of the severity of the problem is that CALL devoted an entire newsletter to rehearsals (CALL, 1991, April). Too often planning and rehearsals focused on movement to the objective. Without specific rehearsals on actions on the objective, leaders lost control of their units. Battle drills and actions on contact were not rehearsed and mission accomplishment suffered accordingly.

Consolidation and reorganization were generally ineffective. Casualty evacuation is always reported as a problem. Crawford and Hensler stated unequivocally that "evacuation of battlefield casualties was the most challenging CSS task for all battalions that trained at the JRTC (1990, p. 68)." In an introduction to the CALL newsletter entitled Commander's CASEVAC System (1989, November) BG J.M. Lyle commented that "historically, the early days of combat have revealed Casualty Evacuation (CASEVAC) systems to be disjointed and inefficient. This has been validated by years of experience at the Combat Training Centers (CTC)."

Problems with the defense were occasionally quite severe. Position selection and construction were often faulty. Sometimes weapons as sited could not be fired at all or were so poorly positioned that assigned sectors were not covered. Primary positions were inadequately camouflaged and often failed to have the required eighteen inches of overhead cover. Alternate and supplementary positions were very often neglected, not designated at all, or if specified, not improved. Defensive priorities of work were frequently ignored even when explicitly a part of the tactical SOP.

Security, especially weak in the defense, was poor everywhere, a finding echoed by Siebert (1990a) and Crawford and Hensler (1990). Noise, light, and litter discipline were often mentioned, but failure to post security in assembly areas and patrol bases, inadequate use of OP/LPs, security at a halt and during consolidation and reorganization, are indicative of a much larger problem.

Problems in the combat support and combat service support areas tended to occur in between planning and the actual execution. Fire support planning and execution was cited as both a strength and a weakness for the units studied; one third of the companies had it mentioned as both a strength and a weakness. Crawford and Hensler (1990) confirmed that fire support planning performance is variable, and use of mortars varies from "good to inadequate." They noted that 80% of the battalions they studied had companies which had difficulty in fire support planning, comparable to the high numbers found here. Battalion fire support is also noted in Thompson, et al., (1991) and in two CALL Newsletters (1990, February and May). Mortars were underutilized

in many battalions; several failed to have sufficient ammunition available. Planning for logistics frequently broke down as supplies were delivered, but late or to incorrect locations; external assets were not integrated. All of these findings are supported in Crawford and Hensler's paper (1990), are noted in the Julien and Siebold (1990) paper on JRTC experiences, and in Shaneyfelt and Lambert's 1992 study of common Infantry problems.

Take Home Packages as a Basis for Analysis

The original intent in analysis of the THPs was to read, code and compare them across missions and across battalions, to document strengths and weaknesses, to provide baseline information on Light Infantry performance at JRTC. This requirement was based on prior research (Dyer, et al., 1992, and Thompson, et al., 1991) and was seen as a foundation for future research into Light Infantry performance. Several unforeseen problems made this more difficult than initially anticipated.

THPs are highly detailed written narratives, over which the researcher has no control. Content is not inclusive, but is highly selective. It is based on a format which is determined long prior to a specific unit's rotation, yet changes over time. The THP is based on items the OCs consider important, and other critical material and information may be omitted. Additionally, the contents are presented in a way to be most useful as unit feedback. Rather than a statistical record of unit performance, the THP is more nearly a subjective personal communication, open to nuances of interpretation.

Shadell (1990), in his analysis of battalions at NTC, also experienced difficulty in extracting information from THPs, and questioned whether the contents were of sufficient quality to support research into complex tactical and training issues. He concluded that although a format more closely adhering to the MTP format would enhance accessibility, the material, if properly used, does provide adequate information for analysis. Snukis (1991), in a thorough study of TLPs and the effective use of time by battalions rotating to the JRTC, was forced to reformat THP information to achieve comparability across battalions. He noted omissions in OCs' reports and perceptions, but indicated that sufficient comments to show trends made the THP a useful and useable unit of analysis.

Each THP contains a great deal of information, the specific content of which is determined by the unit's actual missions, and the OCs' perceptions of unit performance during those missions. Units which have done exceptionally well receive many comments under "unit strengths" although each company appears to get at least a minimum number of positive comments. Similarly, units with relatively poor performance receive considerable comment in "areas in need of improvement." However, there is little

consistency between (or even within) THPs on the actual volume of material, the ordering of comments, and even the method of presentation of the strengths and weaknesses.

Additionally, although each THP cites both strong and weak performance areas, some tasks or subtasks are not mentioned at all. These tasks may not have been observed, omission may have been an oversight, or the execution may have been neither exceptionally good nor exceptionally poor, and therefore not included in the feedback package. Siebert (1990b) also notes that although many units improve during the rotation, and learn from earlier mistakes, the THPs seldom reflect this, and continue to stress deficiencies. Too, as Shadell (1990) noted, most THP comments tend to focus on planning and preparation issues, rather than on mission execution. This may provide a distorted picture of performance, highlighting leader skills and individual tasks rather than collective mission performance.

Specific problem areas, detailed separately below, included redundancy and repetition within THPs, different reporting formats, and variations in the numbers and kinds of missions conducted. Units did not have the same missions, or the same number, and even when the missions might be considered comparable, they did not occur in the same sequence. These findings made comparisons difficult, as some apparent performance deficiencies may have been due to time or sequencing within the rotation.

Comparisons of the units and determination of strengths and weaknesses are made more difficult by the evolution in THP formats which has been occurring over time. In early THPs, variations on one type of format were used to describe the company critical mission tasks, mission summaries, unit strengths and areas in need of improvement. One set of comments, encompassing performance in all the missions performed during the rotation, was combined in the description, followed by a unified set of home station training recommendations. More recently, a different format has been followed. A description of each separate mission is followed by its strengths and weaknesses, and training recommendations, as well as specific comments on leadership, individual and collective skills. Areas in need of improvement offer observations and recommendations for each issue. For these THPs, therefore, a much better picture is gained of the unit's mission performance as distinct from the leader's performance, and of potential differences between, for example, ability to plan for the defense and plan for the attack. The THP format is currently again in the process of change, and future THPs will undoubtedly have improved methods of providing unit feedback.

Since most of the unit THPs studied herein used the old format, it was used as the basis for coding performance. Some

loss of discrimination occurred, particularly for more recent units. A company which excelled at planning for casualty treatment in the defense but failed in casualty evacuation for two separate offensive missions received one positive and one negative comment. This type of information could not consistently be determined for the earlier rotations.

Although most THPs reflect similar missions, there were instances where, for example, a unit performed two attack missions, but no defense; or in addition to the typical attack, defense, and search and attack, executed a second search and attack mission. Additionally, one of a battalion's companies may have been attached to another unit, and may not have been a participant to the same degree as the others within the company. In a similar vein, some units performed air assault, or a specific civil and military operations mission; those who did cannot be readily compared with those who did not. One battalion did not execute a defense but performed several attacks. They had more chances to excel at, or fail at, offensive operations.

In view of the fatigue which may tend to overcome most units toward the end of their JRTC rotations, the order of presentation of the mission may also influence the apparent and real performance. Later missions may offer chances for improvement and remediation of errors, or better execution of the planning process, but subsequent missions can be complicated by cumulative fatigue, which may be reflected in deteriorating performance. Loss of key leaders which carries over from one mission to another may also, like in combat, have a detrimental effect on mission performance.

The OCs who perform the assessments and write the THPs are as objective as possible, using standard references and measurements. However, each OC's background and particular areas of interest and expertise influence the selection of items cited and the ways in which they are reported. This may provide misleading patterns in the THPs as each OC's style may be reflected. This may also lead to tendencies toward or consistencies in omissions. An example of this became apparent as the THPs were being coded. In seven companies (16%), planning for and the use of smoke were recommended for further training at home station. However, all seven recommendations were made by the same company OC; no others mentioned it. Similar patterns of individual OC emphasis are apparent elsewhere.

Home Station Training Recommendations

The final portion of each THP covers OC recommendations for home station training (HST). It was originally felt that the HST recommendations would be useful in comparing unit performance, but problems are apparent in use of this information. Although

the specific content is excellent, for several reasons these recommendations may be of limited use in describing company performance. With a few exceptions, there was a tendency to boilerplate this section and many THPs had nearly identical wording; recommendations were repeated, nearly verbatim, from one THP to another.

Sometimes a company which performed very poorly in an area did not have training recommended for that task. Some companies whose performance on a particular task was not mentioned as in need of improvement had home station training recommended. Finally, some of the areas most in need of improvement (e.g., OPSEC) were rarely highlighted. Some recommendations are only loosely tied to the preceding comments and a unit may tend not to look at them because initial reading will readily highlight the sameness and duplications.

These findings tend to reduce the face validity of looking at HST recommendations as performance discriminators between battalions. The information cannot, however, be discounted, as it correctly focuses on perceived weaknesses, and provides good suggestions for improving training.

Some HST recommendations are not found on mission task lists but are found in FM 25-101 (DA, 1990). They cover a wide variety of training recommendations and tasks, and were frequently used as catchall suggestions. For example, most THPs included some version of the following: "Use the ARTEP (MTP) series of manuals as the framework for all multiechelon training." "Conduct all training in accordance with FM 7-70/7-8, 7-71/7-10, 101-5, and 101-5-1. Pay special attention to troop leading procedures."

Multi-task training categories include the use of "force-on-force" training, recommended for over half of the companies ["Train force-on-force with MILES. Start training at buddy team level, fight one soldier against a two man buddy team"]. Force on force training should incorporate combat realism, external assets, and sufficient external assessment to gain a good picture of a unit's performance, capabilities, and limitations.

Similarly, "multi-echelon training" was recommended for nearly half of the companies ["Use the ARTEP MTP series of manuals as the framework for all multi-echelon training... incorporate fire support, logistics and contingency planning during multi-echelon training to develop techniques which support the scheme of maneuver"]. Another recurring recommendation was for after-action reviews (AARs) ["Conduct AARs at all levels. Always review individual soldier actions and leader command and control." "Execute AARs after all unit training to help identify training weaknesses. Upon completion of rehearsals, have all key leaders assess proficiency so subunit rehearsals can be focused on fixing execution shortcomings"].

Multi-echelon training followed immediately by a good after-action review would provide each unit the chance to train on all aspects of a mission, with timely critique. Feedback would enhance both leader and soldier performance. Leader planning problems show a need for more frequent practice of all TLPs; incorporation of the leader tasks into home station training would provide that opportunity. The stress on execution of battle drills and the formation and adherence to a sound tactical SOP were mentioned for most companies. Well rehearsed and executed drills could go far toward remedying some of the problems found in actions on contact and on the objective. Similarly, a good tactical SOP would help in alleviating some problems found during consolidation and reorganization. Drills and SOPs would also help C², particularly during actions on the objective, and thereby support mission proficiency.

The recommendations for training at home station, although not always directly tied to the areas in need of improvement, tended to cover most of the weaknesses in unit performance. Many of these problem areas (e.g., time management, dissemination of information, OPORDs, rehearsals), with potential solutions, are covered as CTC "Lessons Learned" in a CALL Newsletter published in October, 1989. The primary implication of their presentation as "lessons learned" is that, unfortunately, no problems are new ones, and training at home station remains inadequate to insure mission ready performance.

Conclusions

Discussion of areas in need of improvement as found in the JRTC THPs encompasses every area of the BOS, and every mission at every level. The shortfalls, deficiencies and outright failures in performance evident in the 45 companies studied here were similar to those highlighted by Crawford and Hensler (1990), Snukis (1991), and Siebert (1990a and 1990b). They reflect Light Infantry problems described by Shaneyfelt and Lambert (1992), and Thompson, et al., (1991). They are little different from NTC problems described by Shadell (1990) and in CALL Bulletins (1989, October). They also reflect the areas noted in Appendix D of FM 25-101 (DA, 1990): command and control, actions on contact/objective, reconnaissance and surveillance, coordination and CS/CSS. No matter how or by whom the performance is analyzed, areas in need of improvement are obvious and inescapable. The areas of strength observed at JRTC are few, and inconsistent.

The JRTC units selected for study here thus fit the typical patterns of units at the CTCs. This performance, despite or perhaps because of it, provides support for continuation of the CTC program as a valuable learning experience and means of training assessment. Infantry units spend a stressful and action

filled ten days fighting against a well trained opponent. Additionally, their performance is scrutinized in the greatest detail, and areas found deficient are highlighted to permit remediation and improved performance. A battalion very quickly learns its strengths and weaknesses; this provides the opportunity for change. The THPs, while imperfect, provide valuable feedback for the unit, with easier access to information than the T&EO data (see Fober, 1993) and the videotaped AARs.

JRTC THP feedback stresses that units must build from simple to complex tasks and provide the opportunity for continuous critique from small unit leaders at squad, platoon and company level. Drills, executed in combination with good tactical SOPs, will build teamwork and cohesion, enhance C², and help to standardize performance in critical situations. Multiechelon training to standard on all items of a unit's METL enhances combat readiness.

Training at home station must always be as for combat, with external assets and as much battlefield realism as possible. Crawford and Hensler summed up both the problems and the solutions by stating that what their "research uncovered is an overwhelming need to enhance training conditions and standards at home station (1990, p. 99)." Infantry units must continue to use the CTC experience as a highly structured training event, one which must be approached remembering the axiom "Train as you intend to fight."

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APPENDIX A

EXAMPLE TAKE HOME PACKAGE FORMAT

PART I - BRIGADE TASK FORCE OPERATIONS

Annex A: Brigade Task Force Trends

1. Command, Control and Communications
2. Intelligence
3. Air Defense
4. Mobility/Counter mobility/Survivability
5. Nuclear, Biological, and Chemical

Annex B: Aviation Trends

1. Aviation Task Force
2. Assault Helicopter Company
3. Air Cavalry Squadron
4. Forward Support Medical Evacuation Team

Annex C: Combat Service Support and Combat Support Trends

1. Brigade Rear Command Post/Brigade XO/S1/S4
2. Forward Area Support Team/Forward Area Support and Coordinating Officer (FASCO)
3. Forward Supply Company
4. Forward Support Maintenance Company
5. Forward Support Medical Company
6. Military Police Platoon
7. Unit Ministry Team
8. Field Artillery Battalion Logistics Operations and Headquarters and Service Battery

Annex D: Special Operations Forces Overview

1. Special Forces Detachments
2. Psychological Operations
3. Civil Affairs

Annex E: Brigade Task Force List of Audio-Visual Materials

1. Brigade Task Force After-Action Reviews
2. Aviation After-Action Reviews
3. Combat Service Support After-Action Reviews

PART II - BATTALION TASK FORCE OPERATIONS

Annex F: Battalion Task Force Mission Summaries

1. Phase 1 (D-Day to D+N)
 - A. Mission: Conduct a ...
 - (1) Mission Standards
 - (a)...(n)
 - (2) Mission Execution Summary
 - B. System Summary for Phase
 - (1) Command, Control and Communication
 - (2) Intelligence
 - (3) Maneuver
 - (4) Fire Support
 - (5) Air Defense
 - (6) Mobility/Counter mobility/Survivability
 - (7) Combat Service Support
 - C. Personnel Casualties, Battle Damage, and Fire Support Data for the Mission
 - (1) Personnel Casualties
 - (2) Task Force Equipment Damaged or Destroyed
 - (3) Task Force Weapon System Effectiveness
 - (4) Task Force Fire Support Data
2. Phase 2 (D+N to D+...)
 - A. Mission: Conduct a ...
 - B. System Summary for Phase
 - C. Personnel Casualties, Battle Damage, and Fire Support Data for the Mission
3. Phase...
4. Personnel Casualties, Battle Damage, and Fire Support Data Summary
 - A. Personnel Casualties
 - B. Task Force Equipment Damaged or Destroyed
 - C. Task Force Weapons System Effectiveness
 - D. Task Force Fire Support Data

Annex G: Battalion Task Force Trends

1. Command, Control and Communication
2. Intelligence
3. Maneuver
4. Fire Support
5. Air Defense
6. Mobility/Counter mobility/Survivability
7. Nuclear, Biological, Chemical
8. Combat Service Support

Annex H: Company/Battery/Platoon Trends

1. Company A
2. Company B
3. Company C
4. (Company D)
5. (Tank Platoon)
6. Battery C (A)
7. Headquarters and Headquarters Company
8. Scout Platoon
9. Antiarmor Platoon
10. 81mm Mortar Platoon
11. Combat Trains
12. Field Trains
13. Support Platoon
14. Brigade Maintenance Section (-)
15. Medical Platoon/Battalion Aid Station
16. Communications Platoon

Annex I: Battalion Task Force List of Audio/Visual Materials

1. Battalion Task Force After-Action Reviews
2. Final Battalion Task Force After-Action Review
3. Intelligence After-Action Reviews
4. Fire Support After-Action Reviews
5. Mobility/Counter-mobility/Survivability After-Action Reviews
6. Company After-Action Reviews
7. Platoon After-Action Reviews
8. Battery After-Action Reviews
9. Armor After-Action Reviews
10. Chemical After-Action Reviews

BATTALION LEVEL DETAIL

Annex A: Task Force Mission Summaries

1. Phase 1 (D-Day to D+N)
 - A. Mission: Conduct a ...
 - (1) Mission Standards
(a)...(n)
 - (2) Mission Execution Summary
 - B. System Summary for Phase
 - (1) Command, Control and Communication
 - (2) Intelligence
 - (3) Maneuver
 - (4) Fire Support
 - (5) Air Defense
 - (6) Mobility/Counter mobility/Survivability
 - (7) Combat Service Support
 - C. Personnel Casualties, Battle Damage, and Fire Support Data for the Mission
 - (1) Personnel Casualties

	Task Force	Enemy
Start of Action	*	
Killed in Action		
Wounded in Action		
Died of Wounds		
Fratricide (KIA/WIA)		
Captured		
* Includes Replacements		
 - (2) Task Force Equipment Damaged or Destroyed
 - (3) Task Force Weapon System Effectiveness
 - (4) Task Force Fire Support Data
2. Phase 2 ...
3. Phase...
4. Personnel Casualties, Battle Damage, and Fire Support Data Summary. The following tables reflect the cumulative data for X days of continuous combat during the rotation.
 - A. Personnel Casualties...
 - B. Task Force Equipment Damaged or Destroyed...
 - C. Task Force Weapons System Effectiveness...
 - D. Task Force Fire Support Data...

Annex B: Task Force Trends

1. Command, Control and Communication

A. Critical Tasks

- (1) BN leaders issue WOs
- (2) BN conducts reconnaissance and other actions to gather information
- (3) BN CDR develops and wargames courses of action
- (4) CDR and staff coordinate and refine the plan
- (5) BN executes changes in task organization
- (6) BN CDR and staff perform, supervise, and monitor preparation
- (7) BN CDR "sees" the battlefield
- (8) BN leaders command and control the execution
- (9) Subordinate CDRs, leaders, and staff coordinate laterally
- (10) BN coordinates with adjacent and supporting HQ
- (11) BN reports
- (12) Conduct Civil-Military Operations

B. Unit Strengths (1) ... N

C. Areas in Need of Improvement (1) ... N

D. Home Station Training Recommendations (1) ... N

2. Intelligence

A. Critical Tasks

- (1) Prepare analysis of the AO to support mission planning
- (2) Determine requirements/recommend and publish PIR and IR
- (3) Prepare an R&S plan/manage collection effort
- (4) Process and disseminate information and intelligence
- (5) Provide intelligence support to the OPSEC effort

B. Unit Strengths (1) ... N

C. Areas in Need of Improvement (1) ... N

D. Home Station Training Recommendations (1) ... N

3. Maneuver

A. Critical Tasks

- (1) Plan for combat
 - (a) Receive the mission
 - (b) Issue a WO
 - (c) Make a tentative plan
 - (d) Initiate movement
 - (e) Reconnoiter
 - (f) Complete the plan
 - (g) Issue the order
- (2) Prepare for combat
 - (a) Supervise
 - (b) Pre-combat inspections (initial/final)
 - (c) Briefbacks
 - (d) Rehearsals
 - (e) Improve/change plan as necessary
- (3) Execute combat operations
 - (a) Move tactically
 - (b) Maintain OPSEC
 - (c) Update/react to change
 - (d) Actions on contact
 - (e) Consolidation
 - (f) Reorganization
- (4) Plan defensive operations
 - (a) Make a tentative plan
 - (b) Reconnoiter
 - (c) Complete the plan
 - (d) Issue the order
- (5) Prepare for defensive operations (priority of work)
 - (a) Establish security
 - (b) Position the security force
 - (c) Position anti-tank and crew served weapons
 - (d) Site priority targets
 - (e) Designate FPF and FPL
 - (f) Assign sectors of fire
 - (g) Clear fields of fire
 - (h) Emplace obstacles, demolitions, and integrate higher directed obstacles
 - (i) Prepare fighting positions
 - (j) Establish wire communications (if possible)
 - (k) Stock forward supply points
 - (l) Reconnoiter possible counterattack routes
 - (m) Prepare alternate and supplementary positions
 - (n) Plan deceptive measures

- (6) Execute defensive operations
 - (a) Security force
 - (b) Handover
 - (c) Main battle area
 - (d) Reserve operations
 - (7) Air assault operations
 - (a) Ground tactical plan
 - (b) Landing plan
 - (c) Air movement plan
 - (d) Load plan
 - (e) Staging plan
 - B. Unit Strengths (1) ... N
 - C. Areas in Need of Improvement (1) ... N
 - D. Home Station Training Recommendations (1) ... N
- 4. Fire Support
 - A. Critical tasks
 - (1) Establish a BN FSE
 - (2) Plan, develop, and communicate a tentative fire support plan
 - (3) Develop and communicate a final fire support plan
 - (4) Prepare fire support assets to execute plan to support maneuver combat operations
 - (5) Execute the fire support plan.
 - B. Unit Strengths (1) ... N
 - C. Areas in Need of Improvement (1) ... N
 - D. Home Station Training Recommendations (1) ... N
- 5. Air Defense
 - A. Critical tasks
 - (1) Develop, coordinate, communicate, and supervise the execution of an air defense plan based on the supported CDR's mission
 - (2) Provide command, control, and sustained operations of air defense elements
 - (3) Provide air defense of static asset, STINGER
 - (4) Provide air defense for a maneuver element, STINGER
 - (5) Provide manual SHORAD control system functions (early warning of enemy aircraft to the maneuver element)
 - B. Unit Strengths (1) ... N
 - C. Areas in Need of Improvement (1) ... N
 - D. Home Station Training Recommendations (1) ... N

6. Mobility/Counter mobility/Survivability

A. Critical tasks

- (1) Plan breaching operations
- (2) Plan counter mobility operations
- (3) Plan survivability operations
- (4) Prepare for breaching operations
- (5) Prepare for counter mobility operations
- (6) Prepare for survivability operations
- (7) Conduct breaching operations
- (8) Conduct route sweep operation
- (9) Conduct counter mobility operations
- (10) Conduct survivability operations

B. Unit Strengths (1) ... N

C. Areas in Need of Improvement (1) ... N

D. Home Station Training Recommendations (1) ... N

7. Nuclear, Biological, Chemical

A. Critical tasks

- (1) Plan chemical defense operations
- (2) Prepare for chemical defense operations
- (3) Defend against persistent and non-persistent chemical agents
- (4) Plan and conduct smoke operations
--- or ---
 - (1) Plan and prepare for NBC attack
 - (2) Plan and conduct smoke operations
 - (3) Plan and conduct decontamination
 - (4) Chemical staff integration into BN operations

B. Unit Strengths (1) ... N

C. Areas in Need of Improvement (1) ... N

D. Home Station Training Recommendations (1) ... N

8. Combat Service Support

A. Critical tasks

- (1) Develop and communicate a CSS plan
- (2) Prepare for CSS operations
- (3) Operate an administrative/logistics (A&L) operations CP
- (4) Conduct supply support operations
- (5) Conduct field services operations
- (6) Conduct BN maintenance operations
- (7) Conduct BN field medical operations
- (8) Conduct strength accounting
- (9) Conduct EPW operations

B. Unit Strengths (1) ... N

C. Areas in Need of Improvement (1) ... N

D. Home Station Training Recommendations (1) ... N

Annex C: Company/Battery/Platoon Trends

1. Company A

A. Critical tasks

- (1) Receive the order
- (2) Conduct mission analysis
- (3) Issue the WO
- (4) Reconnoiter
- (5) Complete the plan
- (6) Issue the order
- (7) Supervise/conduct pre-combat inspections
- (8) Conduct briefbacks and rehearsals
- (9) Conduct movement
- (10) Conduct actions on contact
- (11) Conduct actions on the objective
- (12) Consolidate
- (13) Reorganize
- (14) Air assault

B. Mission task list

- (1) Deliberate defense
- (2) Infiltration attack
- (3) Air assault/ search and attack
- (4) Establish lodgment/ search and attack
- (5) Deliberate attack
- (6) Search and attack
- (7) Civil-military operations/ search and attack
- (8) Conduct forced entry/ air assault
- (9) Conduct forced entry/ establish airhead

C. Mission summary

- (1) Deliberate defense
 - (a) Unit strengths 1 - N
 - (b) Areas in need of improvement 1 - N
 - (c) Personnel casualties
 - (1) Start strength
 - (2) KIA
 - (3) WIA
 - (4) DOW
- (2) Infiltration attack (a - c)
- (3) Search and attack (a - c)

D. Leader skills

- (1) Unit strengths
- (2) Areas in need of improvement

E. Individual skills

- (1) Unit strengths
- (2) Areas in need of improvement

F. Recommended home station training 1 - N

2. Company B...
3. Company C...
4. Battery C
 - A. Critical tasks
 - (1) Conduct tactical movement
 - (2) Conduct battery operations
 - (3) Conduct tactical and technical fire direction support
 - (4) Provide howitzer fires
 - (5) Conduct CSS
 - (6) Provide battery defense
 - B. Unit strengths
 - C. Areas in need of improvement
 - D. Home station training recommendations
5. Headquarters and Headquarters Company
 - A. Critical tasks
 - (1) Prepare for combat operations
 - (2) Provide field trains (FLDT) defense
 - (3) Conduct CSS operations for HHC/attachments
 - (4) Conduct combat/combat support operations as directed by the BN CDR
 - B. - D.
6. Scout Platoon
 - A. Critical tasks
 - (1) Troop leading procedures
 - (2) Precombat inspections (initial/final)
 - (3) Briefbacks
 - (4) Rehearsals
 - (5) Move tactically
 - (6) Maintain OPSEC
 - (7) Actions on contact/the objective
 - (8) Consolidation
 - (9) Reorganization
 - (10) Fire support
 - B. - D.

7. Antiarmor Platoon

A. Critical tasks

- (1) Overwatch/support by fire
- (2) Attack/counterattack by fire
- (3) Occupy AA
- (4) Move tactically
- (5) Occupy TOW firing position
- (6) Prepare TOW firing position
- (7) Employ fire support
- (8) Maintain OPSEC
- (9) Defend against air attack
- (10) Employ air defense measures
- (11) Perform vehicle operations
- (12) Prepare for combat
- (13) Consolidate and reorganize
- (14) Control TOW fires

B. - D.

8. 81mm Mortar Platoon

A. Critical tasks

- (1) Develops a plan to support the TF in combat operations
- (2) Prepares for combat operations
- (3) Provides fire support for the BNTP during combat operations

B. - D.

9. Combat Trains

A. Critical tasks

- (1) Develop a CSS plan
- (2) Conduct CS operations
- (3) Operate a combat trains (CBT) CP
- (4) Conduct supply support operations
- (5) Conduct field services operations
- (6) Conduct battalion maintenance operations
- (7) Conduct strength and accountability operations
- (8) Conduct EPW operations

B. - D.

10. Field Trains

A. Critical tasks

- (1) Prepare for CSS operations
- (2) Operate a field trains (FLDT) CP
- (3) Conduct supply support operations
- (4) Conduct field services operations
- (5) Conduct BN maintenance operations
- (6) Conduct personnel service support (PSS) operations

B. - D.

11. Support Platoon

A. Critical tasks

- (1) Coordinate all transportation support for supply/resupply operations
- (2) Ensures convoys are escorted from the BSA forward
- (3) Coordinates movement of LOGPACS with the FAST
- (4) Maintains communication on the A&L net during LOGPACS
- (5) Integrates fire support planning into his convoy movement plan
- (6) Ensures all drivers are adequately briefed
- (7) Receives hard copy of LOGSTATS from forward elements
- (8) Makes face to face coordination with a rep from the CBT at the LRP.
- (9) Ensures requested supplies go forward

B. - D.

12. Brigade Maintenance Section (-)

A. Critical tasks

- (1) Develop and communicate a maintenance operation plan
- (2) Conduct forward maintenance in combat

B. - D.

13. Medical Platoon/Battalion Aid Station

A. Critical tasks

- (1) Plan and coordinate medical support for battalion missions with supported and supporting units
- (2) Treat casualties forward and return to duty or stabilize and prepare for further evacuation

B. - D.

14. Communications Platoon

A. Critical tasks

- (1) Develop a communications plan to support the BNTF in combat operations
- (2) Install, operate, and maintain communications systems in support of the BNTF in combat operations
- (3) Install, operate and maintain communications systems in support of the CO in combat operations
- (4) Manage the communications systems in support of the BNTF in combat operations.

B. - D.

Annex D: Aviation Trends

1. Aviation Task Force

A. Critical tasks

- (1) Air assault
- (2) Aerial resupply
- (3) Attack operations
- (4) Reconnaissance operations
- (5) Screen operations
- (6) Medical evacuation operations
- (7) Search and rescue
- (8) Sustainment operations

B. - D.

2. Assault Helicopter Company

A. Critical tasks

- (1) Air assault operations
- (2) Airmobile operations
- (3) Logistical resupply
- (4) Sustainment operations

B. - D.

3. Air Cavalry Troop

A. Critical tasks

- (1) Conduct area reconnaissance
- (2) Conduct zone reconnaissance
- (3) Defend as a part of a larger force
- (4) Attack as a part of a larger force

B. - D.

ANNEX E. Combat Service Support and Combat Support Trends

1. Rear Command Post/Brigade XO/S1/S4

A. Critical tasks

- (1) Develop and communicate a CSS Plan
- (2) Prepare for CSS operations
- (3) Operate a logistic operations CP
- (4) Conduct supply support operations
- (5) Conduct field service operations
- (6) Conduct maintenance operations
- (7) Conduct field medical operations
- (8) Conduct personnel service support (PSS) operations
- (9) Conduct rear area security operations

B. - D.

APPENDIX B

BATTALION CHECKLIST

<u>A COMPANY</u>			<u>B COMPANY</u>			<u>C COMPANY</u>		
+	-	HST	+	-	HST	+	-	HST*

PLAN: TLPs

RECEIVE THE MISSION

ISSUE WARNING ORDER

TENTATIVE PLAN

FACTORS OF METT-T

OCOKA

EST OF SIT/MSN ANAL

COUR OF ACT/WARGM

INITIATE MOVEMENT

LEADER RECON

COMPLETE THE PLAN

OPORD PREP/DELIVER

CONTENT

CORRECT FORMAT

KEY PERSONNEL

REFINE/REACT TO CHANGE

PREPARE: SUPR/SPOT CHK

BRIEFBACKS

REHEARSALS

TIME MANAGEMENT

ASSEMBLY AREA PROCEEDS

REST/ALERT PLAN

PRECOMBAT INSPECTIONS

WPNS/EQUIP/VEH

PERSONNEL

SOLDIER LOAD

PERFORM OP MAINTENANCE

CAMOUFLAGE SELF & POSN

Note. HST refers to Recommendations for Home Station Training

<u>A COMPANY</u>			<u>B COMPANY</u>			<u>C COMPANY</u>		
+	-	HST	+	-	HST	+	-	HST

MOVEMENT

TACTICAL MVMT

CORRECT FORMATIONS

ROUTES - CVR&CNCL

BREACH OBSTACLES

KNOCK OUT BUNKER

USE SMOKE

NAVIGATE

KNOW LOCATION

LINK UP/PSSGE

ATTACK/MTC/S&A

ACTIONS ON CONTACT

ACTIONS ON OBJ

FIGHTING/BATTLE PSN

INDIVID MVMT TECH

MOVE AS MBER OF TM

FIRE AND MANEUVER

ASSAULT

RAID

AMBUSH

CONSOLIDATION

DEFEND

PRIORITY OF WORK

SELECT POSITIONS

ALT/SUPPL POSITIONS

CONSTRUCT POSITIONS

OBSTACLES-CONST/CVR

RNGE CRDS/SECT SKCH

DEFEND/ACT ON CNTACT

FIRE DIST & CONTROL

RETROGR/DELAY/W'DRW

AD

MAINTAIN OPSEC

NOISE/LIGHT/LITTER

PATROLS/PATROL BASE

RECON & SURVEILL

OPs/LPs

USE NODs

MINES

ESTABLISH/MAINTAIN COMMO

CHALLENGE/PASSWORD

CALL SIGNS/FREQ

HAND & ARM

COMSEC

<u>A COMPANY</u>			<u>B COMPANY</u>			<u>C COMPANY</u>		
+	-	HST	+	-	HST	+	-	HST

COORDINATE

INTERNAL

EXTERNAL/ADJACENT

COLLECT/REPORT INFO/ID

COMMAND & CONTROL

CONTROL FIRES

REORGANIZATION

CASUALTIES

EPWs

EMPLOY FIRE SUPPORT

MORTARS

INTEGRATE EXTERN ASSETS

SUSTAIN/LOGISTICS

NBC

MOU

MARKSMANSHIP

MORALE/CONDIT/HEALTH

BATTLE DRILLS

AAR

TSOP

AIR ASSAULT OPNS

CHALKS

PZ/LZ

BRIEF

PLANS

MULTIECHELON TNG

FORCE ON FORCE

APPENDIX C

COMPANY THPs: STRENGTHS AND AREAS IN NEED OF IMPROVEMENT

	<u>POSITIVE</u>		<u>NEGATIVE</u>		<u>NEITHER</u>		<u>BOTH*</u>	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
<u>PLAN:</u>								
TLPs	2	4	16	36	27	60	0	0
RECEIVE THE MISSION	4	9	24	53	17	38	0	0
ISSUE WARNING ORDER	8	18	13	29	24	53	0	0
TENTATIVE PLAN	6	13	32	71	10	22	3	7
FACTORS OF METT-T	10	22	30	67	13	29	8	18
OCOKA	1	2	20	44	25	56	1	2
EST OF SIT/MSN ANAL	7	16	23	51	18	40	3	7
COUR OF ACT/WARGAME	6	13	30	67	11	24	2	4
INITIATE MOVEMENT	1	2	2	4	42	93	0	0
LEADER RECON	6	13	20	44	20	44	1	2
COMPLETE THE PLAN	2	4	17	38	28	62	2	4
OPORD - PREP/DELIVER	5	11	11	24	29	64	0	0
CONTENT	7	16	27	60	11	24	0	0
CORRECT FORMAT	13	29	8	18	24	53	0	0
KEY PERSONNEL	9	20	7	16	29	64	0	0
REFINE/REACT TO CHANGE	8	18	13	29	27	60	3	7
<u>PREPARE:</u>								
SUPRVISE/SPOT CHECK	5	11	25	56	18	40	3	7
BRIEFBACKS	13	29	22	49	12	27	2	4
REHEARSALS	6	13	38	84	4	9	3	7
TIME MANAGEMENT	8	18	31	69	10	22	4	9
ASSEMBLY AREA PROCEDURES	5	11	14	31	27	60	1	2
REST/ALERT PLAN	5	11	24	53	18	40	2	4
PRECOMBAT INSPECTIONS	11	24	23	51	14	31	3	7
WPNS/EQUIP/VEHICLES	7	16	20	44	19	42	1	2
PERSONNEL	3	7	6	13	36	80	0	0
SOLDIER LOAD	21	47	10	22	15	33	1	2
PERFORM OP MAINTENANCE	8	18	19	42	23	51	5	11
CAMOUFLAGE SELF/POSITION	3	7	16	36	28	62	2	4

Note. * Both represents the number of companies where both positive and negative comments were received; the number is embedded in the positive and negative columns so N = 45.

<u>POSITIVE</u>		<u>NEGATIVE</u>		<u>NEITHER</u>		<u>BOTH</u>	
<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>

EXECUTE:

MOVEMENT

TACTICAL MOVEMENT	30	67	32	71	1	2	18	40
CORRECT FORMATIONS	23	51	21	47	10	22	9	20
ROUTE/CVR & CONCEAL	10	22	17	38	23	51	5	11
BREACH OBSTACLES	1	2	7	16	38	84	1	2
KNOCK OUT BUNKER	1	2	2	4	42	93	0	0
USE SMOKE	2	4	8	18	35	78	0	0
NAVIGATE	23	51	11	24	12	27	1	2
KNOW LOCATION	9	20	13	29	26	58	3	7
LINK UP/PASSAGE	4	9	12	27	30	67	1	2

ATTACK/MTC/SEARCH & ATTACK

ACTIONS ON CONTACT	4	9	34	76	10	22	3	7
ACTIONS ON OBJECTIVE	3	7	39	87	6	13	3	7
FIGHTING/BATTLE PSN	1	2	11	24	34	76	1	2
INDIV MVMT TECHNIQ	6	13	13	29	28	62	2	4
MOVE AS MBR OF TEAM	4	9	9	20	22	49	0	0
FIRE AND MANEUVER	4	9	24	53	19	42	2	4
ASSAULT	0	0	7	16	38	84	0	0
RAID	1	2	2	4	42	93	0	0
AMBUSH	1	2	8	18	36	80	0	0
CONSOLIDATION	5	11	32	71	9	20	1	2

DEFEND*(only 14 battalions)

PRIORITY OF WORK	4	10	19	45	20	48	1	2
SELECT POSITIONS	3	7	21	50	20	48	2	5
ALT/SUPPL POSITIONS	0	0	20	48	22	52	0	0
CONSTRUCT POSITIONS	5	12	19	45	20	48	2	5
OBSTACLES-CONST/CVR	3	7	21	50	20	48	2	5
RNGE CRDS/SECT SKCH	2	5	14	33	26	62	0	0
DEFEND/ACT ON CNTACT	1	2	16	39	25	60	0	0
FIRE DIST & CONTROL	0	0	7	17	35	83	0	0
RETROGR/DELAY/W'DRW	0	0	2	4	43	96	0	0
AIR DEFENSE	1	2	1	2	43	96	0	0

MAINTAIN OPSEC	12	27	42	93	2	4	11	24
NOISE/LIGHT/LITTER	12	27	28	62	11	24	6	13
PATROLS/PATROL BASE	7	16	17	38	25	56	4	9
RECON & SURVEILL	5	11	19	42	24	53	3	7
OPs/LPs	5	11	34	76	9	20	3	7
USE NODs	21	47	5	11	19	42	0	0
MINES	3	7	4	9	38	84	0	0

	<u>POSITIVE</u>		<u>NEGATIVE</u>		<u>NEITHER</u>		<u>BOTH</u>	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
<u>ESTABLISH/MAINTAIN COMMO</u>	11	24	35	78	6	13	7	16
<u>CHALLENGE/PASSWORD</u>	1	2	4	9	40	89	0	0
<u>CALL SIGNS/FREQUENCY</u>	0	0	3	7	42	93	0	0
<u>HAND & ARM SIGNALS</u>	6	13	8	18	33	73	2	4
<u>COMSEC</u>	0	0	2	4	43	96	0	0
<u>COORDINATE</u>	2	4	22	49	21	47	0	0
<u>INTERNAL</u>	6	13	29	64	15	33	5	11
<u>EXTERNAL/ADJACENT</u>	3	7	24	53	19	42	1	2
<u>COLLECT/REPORT INFO/ID</u>	11	24	36	80	5	11	7	16
<u>COMMAND & CONTROL</u>	7	16	37	82	6	13	5	11
<u>CONTROL FIRES</u>	1	2	31	69	14	31	1	2
<u>REORGANIZATION</u>	7	16	29	64	11	24	2	4
<u>CASUALTIES</u>	16	36	33	73	7	16	11	24
<u>EPWs</u>	5	11	14	31	26	58	0	0
<u>EMPLOY FIRE SUPPORT</u>	19	42	39	87	1	2	14	31
<u>MORTARS</u>	13	29	23	51	15	33	7	16
<u>INTEGRATE EXTERN ASSETS</u>	10	22	17	38	22	49	4	9
<u>SUSTAIN/LOGISTICS</u>	10	22	16	36	23	51	4	9
<u>NBC</u>	2	4	9	20	34	76	0	0
<u>MOUT</u>	1	2	1	2	44	98	1	2
<u>MARKSMANSHIP</u>	4	9	5	1	37	82	1	2
<u>MORALE/CONDIT/HEALTH</u>	31	69	9	20	11	24	6	13
<u>BATTLE DRILLS</u>	2	4	28	62	17	38	2	4
<u>AFTER ACTION REVIEWS</u>	3	7	0	0	42	93	0	0
<u>TACTICAL SOP</u>	2	4	16	36	28	62	1	2

APPENDIX D

HOME STATION TRAINING RECOMMENDATIONS

	<u>COMPANY</u>	
	<u>n</u>	<u>%</u>
<u>PLAN:</u>		
<u>TLPs</u>	20	44
<u>RECEIVE THE MISSION</u>	4	9
<u>ISSUE WARNING ORDER</u>	0	0
<u>TENTATIVE PLAN</u>	4	9
<u>FACTORS OF METT-T</u>	5	11
<u>OCOKA</u>	1	2
<u>EST OF SIT/MISSION ANALYSIS</u>	17	38
<u>COURSES OF ACTION/WARGAME</u>	25	56
<u>INITIATE MOVEMENT</u>	1	2
<u>LEADER RECON</u>	3	7
<u>COMPLETE THE PLAN</u>	1	2
<u>OPORD - PREPARE/DELIVER</u>	10	22
<u>CONTENT</u>	9	20
<u>CORRECT FORMAT</u>	3	7
<u>KEY PERSONNEL</u>	3	7
<u>REFINE/REACT TO CHANGE</u>	0	0
<u>PREPARE:</u>		
<u>SUPRVISE/SPOT CHECK</u>	5	11
<u>BRIEFBACKS</u>	8	18
<u>REHEARSALS</u>	26	58
<u>TIME MANAGEMENT</u>	16	36
<u>ASSEMBLY AREA PROCEDURES</u>	2	4
<u>REST/ALERT PLAN</u>	4	9
<u>PRECOMBAT INSPECTIONS</u>	7	16
<u>WEAPONS/EQUIPMENT/VEHICLES</u>	2	4
<u>PERSONNEL</u>	2	4
<u>SOLDIER LOAD</u>	1	2
<u>PERFORM OPERATOR MAINTENANCE</u>	0	0
<u>CAMOUFLAGE SELF/POSITION</u>	0	0

COMPANY
n %

EXECUTE:

MOVEMENT

TACTICAL MOVEMENT	9	20
CORRECT FORMATIONS	0	0
ROUTE/COVERED & CONCEALED	2	4
BREACH OBSTACLES	2	4
KNOCK OUT BUNKER	1	2
USE SMOKE	7	16
NAVIGATE	1	2
KNOW LOCATION	0	0
LINK UP/PASSAGE	3	7

ATTACK/MTC/SEARCH & ATTACK

ACTIONS ON CONTACT	26	58
ACTIONS ON OBJECTIVE	29	64
FIGHTING/BATTLE POSITION	0	0
INDIVIDUAL MVMT TECHNIQUES	2	4
MOVE AS MEMBER OF TEAM	0	0
FIRE AND MANEUVER	4	10
ASSAULT	4	10
RAID	1	2
AMBUSH	11	24
CONSOLIDATION	15	33

DEFEND*(only 14 battalions)

PRIORITY OF WORK	10	24
SELECT POSITIONS	0	0
ALT/SUPPL POSITIONS	0	0
CONSTRUCT POSITIONS	1	2
OBSTACLES-CONSTRUCT/COVER	2	5
RANGE CARDS/SECTOR SKETCH	1	2
DEFEND/ACTION ON CONTACT	3	7
FIRE DISTRIBUTION & CONTROL	4	10
RETROGR/DELAY/WITHDRAW	0	0
AIR DEFENSE	0	0

MAINTAIN OPSEC

NOISE/LIGHT/LITTER	9	20
PATROLS/PATROL BASE	2	4
RECON & SURVEILLANCE	2	4
RECON & SURVEILLANCE	5	11
OPs/LPs	1	2
USE NODs	0	0
MINES	0	0

	COMPANY	
	n	%
<u>ESTABLISH/MAINTAIN COMMO</u>	2	4
<u>CHALLENGE/PASSWORD</u>	0	0
<u>CALL SIGNS/FREQUENCY</u>	0	0
<u>HAND & ARM SIGNALS</u>	0	0
<u>COMSEC</u>	0	0
<u>COORDINATE</u>	5	11
<u>INTERNAL</u>	1	2
<u>EXTERNAL/ADJACENT</u>	1	2
<u>COLLECT/REPORT INFO/ID</u>	6	13
<u>COMMAND & CONTROL</u>	17	38
<u>CONTROL FIRES</u>	10	22
<u>REORGANIZATION</u>	15	33
<u>CASUALTIES</u>	10	22
<u>EPWs</u>	2	4
<u>EMPLOY FIRE SUPPORT</u>	21	47
<u>MORTARS</u>	14	31
<u>INTEGRATE EXTERNAL ASSETS</u>	15	33
<u>SUSTAIN/LOGISTICS</u>	16	36
<u>NBC</u>	0	0
<u>MOUT</u>	0	0
<u>MARKSMANSHIP</u>	4	9
<u>MORALE/CONDITIONING/HEALTH</u>	1	2
<u>BATTLE DRILLS</u>	36	80
<u>AFTER ACTION REVIEWS</u>	19	42
<u>TACTICAL SOP</u>	36	80
<u>MULTIECHELON TRAINING</u>	21	47
<u>FORCE ON FORCE TRAINING</u>	23	51